

# **FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-5370**

## **FACILITY NAME Asotin County Regional Landfill**

### **SUMMARY**

The Asotin County Regional Landfill is located in Southeastern Washington, in the Northeastern part of Asotin County. This facility is a Significant Industrial User and but is not subject to Categorical Pretreatment Standards. Development of the landfill has proceed from west to east using a shallow trench method, with trench orientation along an alignment generally parallel to the northward downslope characteristic of the site.

The leachate collection system, which was constructed in 1992, collects leachate generated from the landfill's bottom 60 mil HDPE membrane liner. Cells B & C, are active and generating leachate. The leachate comes from the 13.1 inches annual rainfall in the area. From this rainfall and over the last five year, the highest monthly wastewater discharge flow was approximately 67,300 gallons and calculated daily wastewater discharge flow of approximately 2,200 gallons per day in 2003. There currently is no treatment process or facility at the Asotin County Regional Landfill to treat the wastewater. Also, at this time, the wastewater discharge appear to be not violating any of the Clarkston's Local Limits. Additionally, Clarkston's Wastewater Treatment Plant currently appears it can accept the daily discharge flows and wastewater parameters

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined in the Brown and Caldwell engineering report "Asotin County Landfill Engineering Report", October, 1992. The conclusions on landfill leachate quantity and composition were "no true leachate (water which has been in contact with solid waste) will be generated". It was estimated that initial volumes could be as high as 10,000 gallons/day but this would decrease over time. Based on these conclusion, the collected wastewater was allowed in the City of Clarkston's Wastewater Treatment Plant and sewer system. To further verify, these conclusion, a updated engineering report will be required during this permit cycle. Also, in order to protect the City of Clarkston's Wastewater Treatment Plant from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations are based on local limits established by City of Clarkston's Wastewater Treatment Plant) and codified in ordinance.

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for 5 years.

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## INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. **ST-5370**. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to City of Clarkston's Wastewater Treatment. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix D—Response to Comments.

<b>GENERAL INFORMATION</b>	
Applicant	Asotin County Regional Landfill
Facility Name and Address	Asotin County Regional Landfill, 2901 6 <sup>th</sup> Avenue, Clarkston, WA 99403
Type of Facility:	Municipal Landfill SIC Code: 4953
Facility Discharge Location	S ½, SW1/4, Sec 36, T.11N., R.45 E.W.M. Latitude: 46° 23' 07" N Longitude: 117° 06' 37" W.
Treatment Plant Receiving Discharge	City of Clarkston's Wastewater Treatment Plant (Clarkston, Washington)
Contact at Facility	Name: Stephen L. Becker (Solid Waste Supervisor) Telephone #:509-758-1965
Responsible Official	Name: Joel M. Ristau Title:Asotin County Engineer Address: 2901 6 <sup>th</sup> Avenue; Clarkston, WA 99403 Telephone #:509-758-1965 FAX #509-758-1977

## BACKGROUND INFORMATION

### DESCRIPTION OF THE FACILITY

The Asotin County Regional Landfill is located in Southeastern Washington, in the Northeastern part of Asotin County. It is about 75 miles South of Spokane and # miles Southwest of Clarkston. The landfill property is bounded by farmland to the South and West, rural residential to the East and 6<sup>th</sup> Avenue to the North. See Appendix C-Map #1-Location of Asotin County Landfill. This facility is a Significant Industrial User and but is not subject to Categorical Pretreatment Standards.

### HISTORY

The Asotin County Landfill was first permitted in 1972 by the Department of Natural Resources (DNR). The parcel on which it is located was originally leased from DNR, but has since been purchased by Asotin County. The site comprises about 77 acres located South of 6<sup>th</sup> Avenue. In addition to the waste generated in Asotin County, the landfill accepts waste from Clarkston, Asotin, Lewiston (Idaho), and Nez Perce County (Idaho).

Development of the landfill has proceed from west to east using a shallow trench method, with trench orientation along an alignment generally parallel to the northward downslope characteristic of the site. See Appendix C Map#2-Layout of Asotin County Landfill. The County intends to operate the landfill until the permitted capacity is exhausted.

### LEACHATE COLLECTION SYSTEM

The leachate collection system, which was constructed in 1992, collects leachate generated from the landfill's bottom 60 mil HDPE membrane liner. Cells B & C, are active and generating leachate. The leachate comes from the 13.1 inches annual rainfall in the area. From this rainfall and over the last five year, the highest monthly wastewater discharge flow was approximately 67,300 gallons and calculated daily wastewater discharge flow of approximately 2,200 gallons per day in 2003. For more information on wastewater discharge flow, see Appendix C-Graph #1 –Total Monthly Flows and Graph #2-Daily Calculated Discharge flows.

The system consists of a perforated 6" HDPE collector pipe located at the North end of Cell A adjacent to 6<sup>th</sup> Avenue. The small leachtee pump station consists of a large sump (approximately 3000 gallons sump) and two WG20 Myers Sewage Grinder Pumps. When level of wastewater reaches approximately 1480 gallons the pumps kick on and discharges to the force main sanitary sewer and then conveys through the County and Clarkston sewer systems to the Clarkston Wastewater Treatment Plant. The wastewater discharge is monitored by 800 Series Magnetic Flowtubes system. This is located approximately at station 18+66 just outside of the administration building in the road.

### TREATMENT PROCESSES

There currently is no treatment process or facility at the Asotin County Regional Landfill to treat the wastewater. Also, at this time, the wastewater discharge appear to be not violating any of the Clarkston's Local Limits. Additionally, Clarkston's Wastewater Treatment Plant currently

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appears it can accept the daily discharge flows and wastewater parameters. Also, Asotin County has an agreement with the City of Clarkston for taking the leachate wastewater from the Regional Landfill. Thus, the Asotin Landfill at this times doe not need any treatment process or facility.

**GROUND WATER**

The landfill is underlain by a large regional aquifer located in the basalt rock hundreds of feet below the surface. This aquifer and other local aquifers have been renamed the Lewiston Basin Aquifer, represent the primary source of groundwater for the Lewiston-Clarkston area, and has been designated a sole-source aquifer under the Safe Drinking Water Act.

At a shallower depth beneath the landfill lies a clay layer with a perched water table on it, which acts as an aquaclude. The top of this clay layer lies between 88 and 159 feet beneath the ground surface. This layer, if laterally extensive beneath the landfill, could inhibit or prevent any leachate or landfill contaminants from reaching the Lewiston Basin Aquifer. The network of monitoring wells around the landfill monitors the perched water table atop the clay layer. It has been concluded that the direction of the groundwater flow is from the south to then northeast and northwest. One the monitoring wells, MW-8 was completed in an aquifer below the perched water table, in an areas where the clay aquaclude is missing. Also, as added protection, as describe in the Leachate Collection system, the landfill's bottom 60 mil HDPE membrane liner.

*PERMIT STATUS*

The previous permit for this facility was issued on June 2, 2000 with an effective Date July 1, 2000.

An application for permit renewal was submitted to the Department on November 2, 2004 and accepted by the Department on November 12, 2004.

*SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT*

The facility last received a compliance inspection on January 14, 2005.

During the history of the previous permit, the Permittee has remained in compliance based on Discharge Monitoring Reports (DMRs) and other reports submitted to the Department and inspections conducted by the Department.

*WASTEWATER CHARACTERIZATION*

The concentration of pollutants in the discharge was reported in the permit application and in discharge monitoring reports. See Appendix C-Table #1 for more information of these parameters. The proposed wastewater discharge is characterized for the following parameters:

Parameter	Concentration
pH	6.5
Fats, Oil, and Grease	ND
Arsenic	.018 mg/l
Chromium, total	.005 mg/l

Parameter	Concentration
Copper, total	.011 mg/l
Lead, total	.001 mg/l
Mercury	ND
Nickel, total	.082 mg/l
Silver, total	.003 mg/l
Zinc, total	.012 mg/l

#### *SEPA COMPLIANCE*

An Environmental Impact Statement was prepared as part of the original application for the Solid Waste Permit for this facility.

### **PROPOSED PERMIT LIMITATIONS**

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined in the Brown and Caldwell engineering report "Asotin County Landfill Engineering Report", October, 1992. The conclusions on landfill leachate quantity and composition were "no true leachate (water which has been in contact with solid waste) will be generated". It was estimated that initial volumes could be as high as 10,000 gallons/day but this would decrease over time. Based on these conclusion, the collected wastewater was allowed in the City of Clarkston's Wastewater Treatment Plant and sewer system. To further verify, these conclusion, a updated engineering report will be required during this permit cycle.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

#### *TECHNOLOGY-BASED EFFLUENT LIMITATIONS*

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110).

#### *EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS*

In order to protect the City of Clarkston's Wastewater Treatment Plant from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary.

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These limitations are based on local limits established by City of Clarkston's Wastewater Treatment Plant) and codified in ordinance. Applicable limits for this discharge include the following:

	<b>EFFLUENT LIMITATIONS</b>
<b>Parameter</b>	<b>Maximum Daily <sup>a</sup></b>
Flow	2500 gallons per day
pH	6 to 9 s.u.
BOD <sub>5</sub>	300 mg/l
TSS	300 mg/l
Fats, Oil, and Grease	100 mg/l
Arsenic	0.2 mg/l
Chromium, total	1.0 mg/l
Copper, total	0.5 mg/l
Lead, total	0.4 mg/l
Mercury	0.05 mg/l
Nickel, total	0.5 mg/l
Silver, total	0.2 mg/l
Zinc, total	1.0 mg/l

<sup>a</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

Pollutant concentrations in the proposed discharge with technology-based controls in place will not cause problems at the receiving POTW such as interference, pass-through or hazardous exposure to POTW workers nor will it result in unacceptable pollutant levels in the POTW's sludge.

**COMPARISON OF LIMITATIONS WITH THE EXISTING PERMIT ISSUED JUNE 2, 2000**

Parameter	Existing Limits	Proposed Limits
Maximum Daily Flow	2600 GPD	2500 GPD

The reduced maximum daily flow is per the request of the permittee. Based off Appendix C-Graph #2 (Daily Calculated Discharge Flows) and conclusions of the 1992 Engineering Report, the proposed change seems valid. However, the 1992 Engineering Report was for Cell A being active and did not address the flows if Cell B, C, and D were open.

### **MONITORING REQUIREMENTS**

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2 and S3. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Monitoring for TDS, Total Alkalinity, NO<sub>3</sub> (as N), NH<sub>3</sub> (as N), Total Organic Carbon, Chloride, Sulfate, Antimony, Barium, Beryllium, Cobalt, Vanadium, Selenium, and Thallium is being required to further characterize the effluent. These pollutant(s) could have a significant impact on the receiving POTW. See Appendix C-Table 1-Raw Sampling Data of Wastewater Pollutants.

### **OTHER PERMIT CONDITIONS**

#### *REPORTING AND RECORDKEEPING*

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

#### *OPERATIONS AND MAINTENANCE*

The proposed permit contains condition S.5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The proposed permit requires submission of an O&M manual for the entire wastewater system.

#### *PROHIBITED DISCHARGES*

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

#### *DILUTION PROHIBITED*

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

#### *NON-ROUTINE AND UNANTICIPATED DISCHARGES*

Occasionally, this facility may generate wastewater which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of



application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for non-routine and unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and opportunities for reuse, Ecology may authorize a direct discharge via the process wastewater outfall or through a stormwater outfall for clean water, require the wastewater to be placed through the facilities wastewater treatment process or require the water to be reused.

#### *SPILL PLAN*

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The proposed permit requires the Permittee to develop and implement a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs.

#### *SLUG DISCHARGE CONTROL PLAN*

The Department has determined that the Permittee has the potential for a batch discharge or a spill that could adversely effect the POTW therefore a slug discharge control plan is required (40 CFR 403.8 (f)).

#### *ENGINEERING REPORT*

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined in the Brown and Caldwell engineering report "Asotin County Landfill Engineering Report", October, 1992. The conclusions on landfill leachate quantity and composition were "no true leachate (water which has been in contact with solid waste) will be generated". It was estimated that initial volumes could be as high as 10,000 gallons/day but this would decrease over time. Based on these conclusions, the collected wastewater was allowed in the City of Clarkston's Wastewater Treatment Plant and sewer system. To further verify, these conclusions, an updated engineering report will be required during this permit cycle. Because the 1992 Engineering Report was for Cell A being active and did not address the flows of if Cell B, C, and D were open and the possible wastewater parameters over time. This approvable engineering report and plans and specification shall be prepared by the Permittee in accordance with WAC 173-240 and submitted to the Department for review and approval.

#### *GENERAL CONDITIONS*

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the

Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

### **PUBLIC NOTIFICATION OF NONCOMPLIANCE**

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

### **RECOMMENDATION FOR PERMIT ISSUANCE**

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for 5 years.

### **REFERENCES FOR TEXT AND APPENDICES**

Washington State Department of Ecology.

Laws and Regulations( <http://www.ecy.wa.gov/laws-rules/index.html> )

Permit and Wastewater Related Information  
(<http://www.ecy.wa.gov/programs/wq/wastewater/index.html>)

## **APPENDICES**

### ***APPENDIX A—PUBLIC INVOLVEMENT INFORMATION***

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on January 6 and January 13, 2005 in the Lewiston Tribune to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on April 20, 2005 in the Lewiston Tribune to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator  
Department of Ecology  
N. 4601 Monroe  
Spokane, WA 99205

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (509) 329-3400, or by writing to the address listed above.

This permit was written by Scott Mallery.

*APPENDIX B—GLOSSARY*

**Ammonia**—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

**Average Monthly Discharge Limitation**—The average of the measured values obtained over a calendar month's time.

**Best Management Practices (BMPs)**--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

**BOD<sub>5</sub>**--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD<sub>5</sub> is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

**Bypass**—The intentional diversion of waste streams from any portion of the collection or treatment facility.

**Categorical Pretreatment Standards**—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

**Compliance Inspection - Without Sampling**--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

**Compliance Inspection - With Sampling**--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

**Composite Sample**—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

**Construction Activity**—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

**Continuous Monitoring**—Uninterrupted, unless otherwise noted in the permit.

**Engineering Report**—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

**Grab Sample**—A single sample or measurement taken at a specific time or over a short period of time as is feasible.

**Industrial User**—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

**Industrial Wastewater**—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

**Interference**— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

**Local Limits**—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

**Maximum Daily Discharge Limitation**—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

**Method Detection Level (MDL)**--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

**Pass-through**— A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase

in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

**pH**—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

**Potential Significant Industrial User**--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

**Quantitation Level (QL)**-- A calculated value five times the MDL (method detection level).

**Significant Industrial User (SIU)**--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority\* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority\* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

\*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

**Slug Discharge**—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

**State Waters**—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

**Stormwater**—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

**Technology-based Effluent Limit**—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

**Total Coliform Bacteria**—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

**Total Dissolved Solids**—That portion of total solids in water or wastewater that passes through a specific filter.

**Total Suspended Solids (TSS)**--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

**Water Quality-based Effluent Limit**—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

*APPENDIX C—TECHNICAL CALCULATIONS*

The following are the maps, graphs, and tables in this Appendix.

Map #1-Location of Asotin County Landfill

Map #2- Layout of Asotin County Landfill

Graph #1- Total Monthly Flows

Graph #2- Daily Calculated Discharge Flows

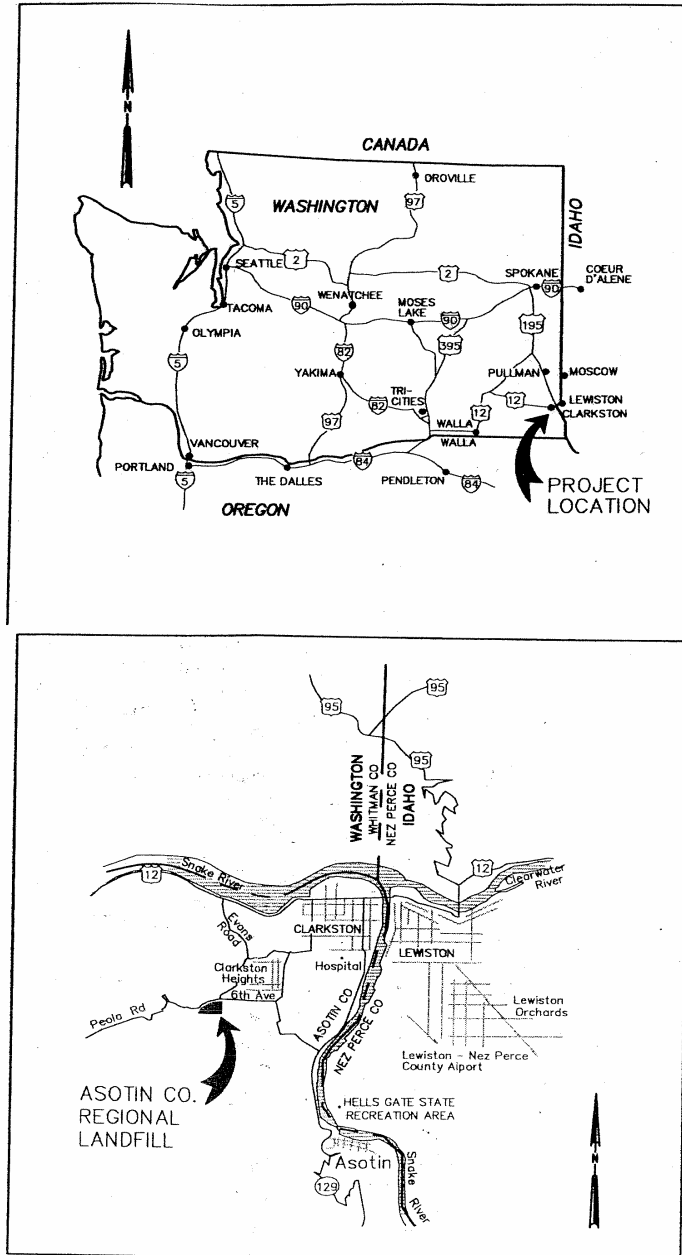
Table #1-Raw Sampling Data of Wastewater Pollutants



FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-5370

FACILITY NAME Asotin County **Regional Landfill**

Appendix C- Map #1- Location of Asotin County Landfill

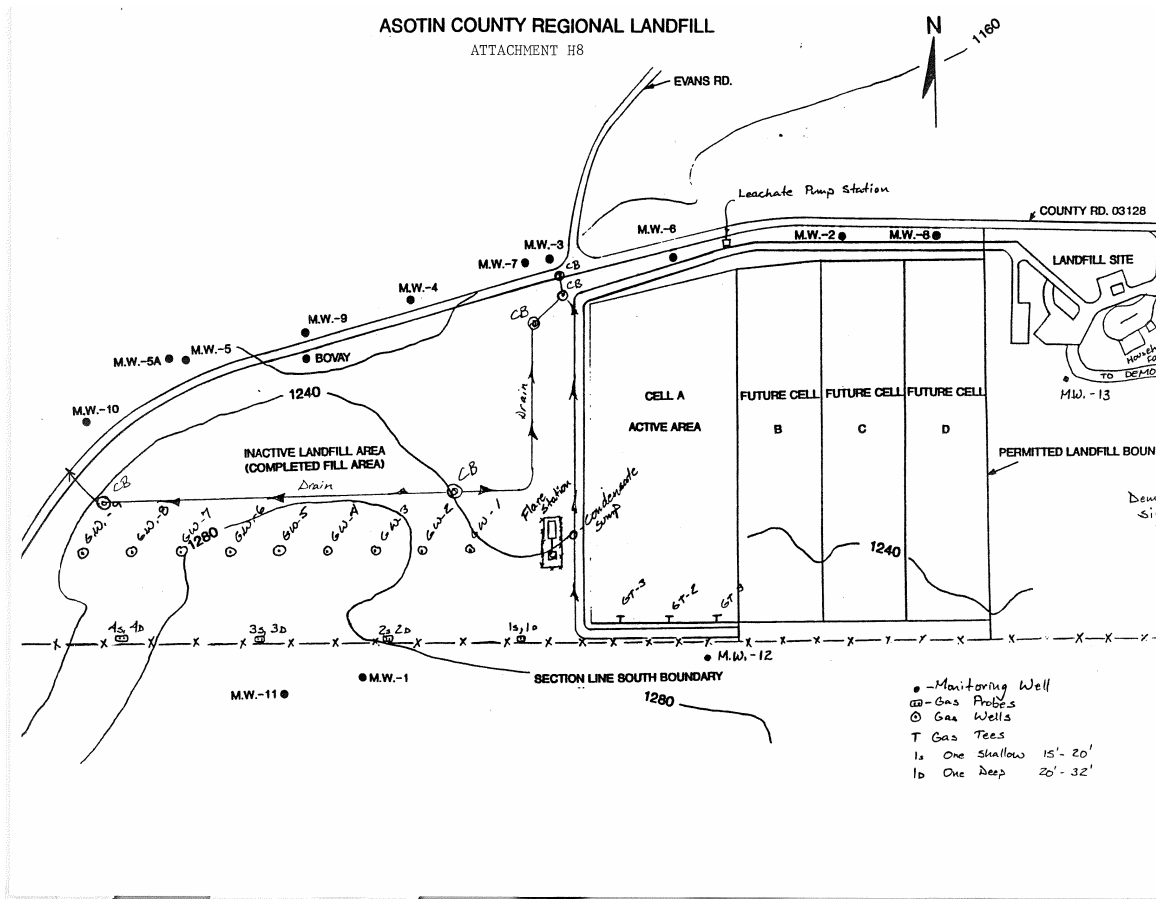


LOCATION MAP  
NTS

# FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-5370

FACILITY NAME Asotin County **Regional Landfill**

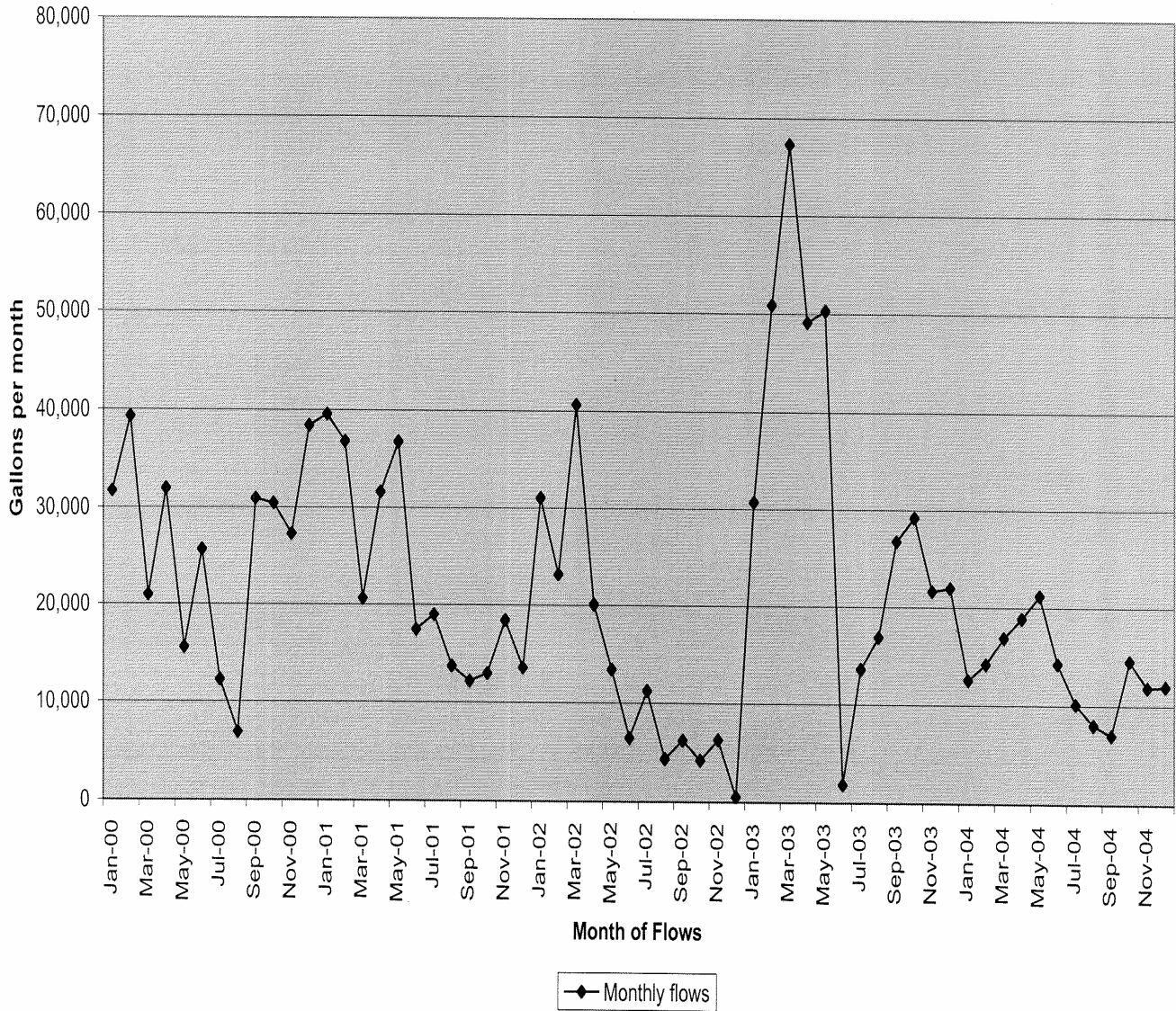
## Appendix C- Map #2- Layout of Asotin County Landfill



FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-5370  
FACILITY NAME Asotin County **Regional Landfill**

Appendix C - GRAPH 1 - TOTAL Monthly Flows

Asotin Landfill Total Monthly Flows

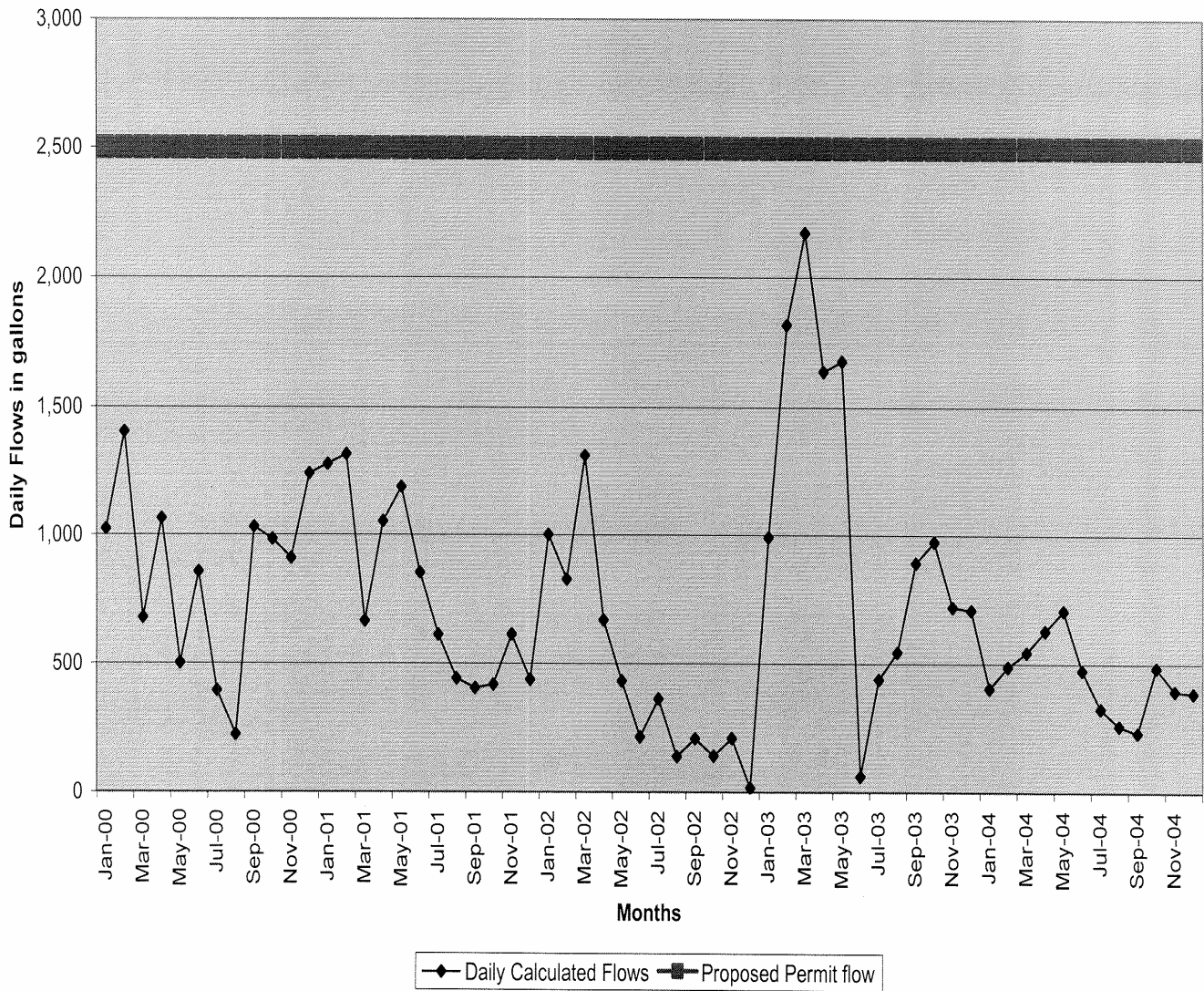


FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-5370

FACILITY NAME Asotin County **Regional Landfill**

Appendix C - Graph #2 - Daily Calculated Discharge Flows

Asotin Landfill Daily Calculated Flows



# FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-5370

FACILITY NAME Asotin County **Regional Landfill**

## Appendix C- Table 1- Raw Sampling Data of Wastewater Pollutants

Parameter	Units	Local Limits	Average	High	Low	2005	2004	2003	2002	2001	2000	1999
BOD	mg/l	300										
TDS	mg/l		2167	3500	1400		2700	3500	1100	2700	1600	1400
Total Alkalinity	mg/l		1537	2300	450		1600	2300	1900	2000	450	973
NO3 (as N)	mg/l		0.317	1.000	0.100		0.200	0.200	0.200	0.200	1	0.100
NH3 (as N)	mg/l		1.805	5.100	0.140		5.1	3.1	0.140	0.200	0.200	2.09
Total Organic C	mg/l		184	360	6		56	330	190	360	160	6
Chloride	mg/l		374	790	203		790	390	300	350	210	203
Sulfate	mg/l		6.0	23.5	1.0		4	3	1	1	3.2	23.5
VOC's	µg/l											
Antimony	mg/l		0.002	0.007	0.001		0.001	0.002	0.007	0.002	0.001	0.001
Barium	mg/l		0.368	0.500	0.160		0.300	0.600	0.160	0.500	0.329	0.317
Beryllium	mg/l		0.0004	0.0010	0.0001		0.001	0.001	0.0002	0.0002	0.0001	0.0001
Cadmium	mg/l	0.2	0.001	0.002	0.0001	ND	0.002	0.001	0.0002	0.0003	0.001	0.0001
Chromium	mg/l	1.0	0.006	0.009	0.0010	0.0040	0.005	0.009	0.0039	0.0062	0.001	0.00821
Cobalt	mg/l		0.006	0.009	0.0040		0.006	0.006	0.004	0.005	0.0085	0.00684
Copper	mg/l	0.5	0.008	0.011	0.0010	0.0150	0.011	0.006	0.0054	0.019	0.001	0.00326
Nickel	mg/l	0.5	0.042	0.082	0.0157	0.0960	0.082	0.08	0.038	0.021	0.016	0.0157
Vanadium	mg/l		0.007	0.005	0.0020		0.004	0.005	0.002	0.007	0.002	0.023
Zinc	mg/l	1.0	0.017	0.012	0.0098	0.0100	0.012	0.01	0.025	0.015	0.0098	0.0323
Arsenic	mg/l	0.2	0.014	0.024	0.0051	0.0130	0.018	0.024	0.015	0.014	0.0094	0.00507
Lead	mg/l	0.4	0.001	0.001	0.0008		0.001	0.001	0.0003	0.0008	0.001	0.00121
Selenium	mg/l		0.025	0.052	0.0082		0.039	0.001	0.052	0.036	0.012	0.00823
Silver	mg/l	0.2	0.001	0.003	0.0007	ND	0.003	0.003	0.0007	0.0002	0.001	0.001
Thallium	mg/l		0.001	0.001	0.0003		0.001	0.001	0.0003	0.003	0.001	0.001

U except for 2002 & 2003

U

U except for 2001 Only U for 2000

Only U for 2000

Only U for 2000

U except for 2001 & 1999

Only U for 2003

U except for 2002 U

Above data is what is required in current permit--Local limits was adopted in October 2004 not part of current permit

Below are other limits that are required by local limits adopted October 2004 and not required by current permit

TSS	mg/l	300										
oil & Grease	mg/l	100				ND						
Chrome, Hex	mg/l	0.25				ND						
Free cyanide	mg/l	0.2				ND						
Cyanide	mg/l	0.64				ND						
Mercury	mg/l	0.05				ND						
pH	mg/l	6 to 9	7.0	8.1	6.5		6.5	6.7	6.6	7.2	8.1	6.8
	µg/l											
	mg/l											

Blank space under years--there is no data available

Note: U is not detected to limit of detection indicated

	ug/l	Landfill	County	City
Diethyl phthalate	2.5			
2,4 Dimethylphenol	13.4			
2 Methylphenol	4.4		9.1	
4 Methylphenol	1.2		40.1	86.9
Bis (2-ethylhexyl)phthalate	2.7		6	
phenol	8.7		14.5	

*APPENDIX D—RESPONSE TO COMMENTS*